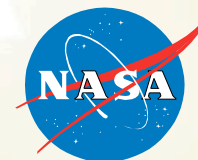


S'COOL



Students' Cloud Observations On-line

HOME

FOR PARTICIPANTS

FIND OUT MORE

FOR TEACHERS

FOR KIDS

ROVER

MESSAGE OF THE MONTH: [New - Make S'COOL observations from anywhere!!! See new Rover pages....](#)

[Français](#) | [Español](#) | [Deutsch](#) | [Italiano](#) | [中文](#) | [Thai](#)

CERES Science Team Meeting
Newport News, VA
April, 2009



Lin Chambers, NASA LaRC, Hampton, VA
Tina Rogerson (ASDC), Camelia Deller,
Joyce Fischer, Jay Madigan and Susan Moore, SSAI

S'COOL Anniversary!



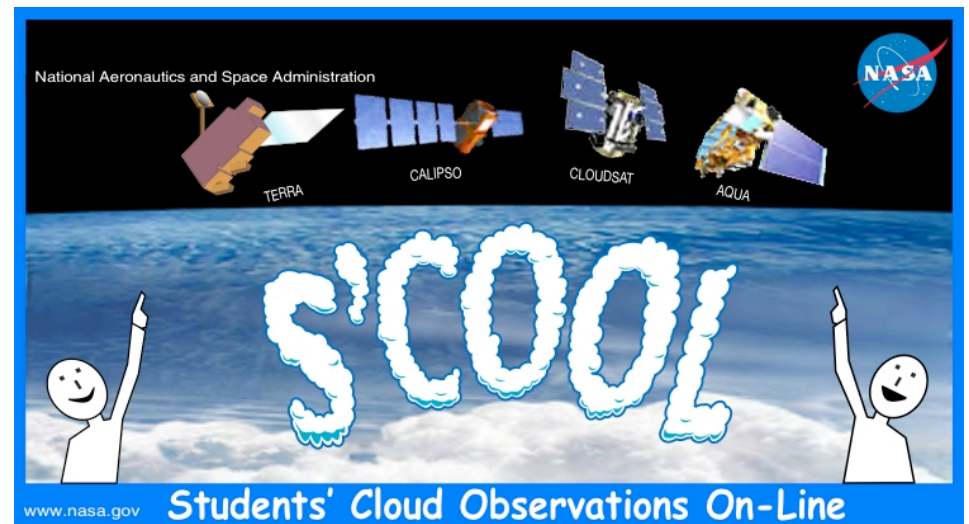
- Jan. 13, 2009 marked the 12th anniversary of the first S'COOL observation
- Updated website look (still in progress) with thanks to Jay Madigan and Tim Marvel
- Held webcast with multi-lingual intro from CERES team
- Next year: Teaching from Space?



What is S'COOL?

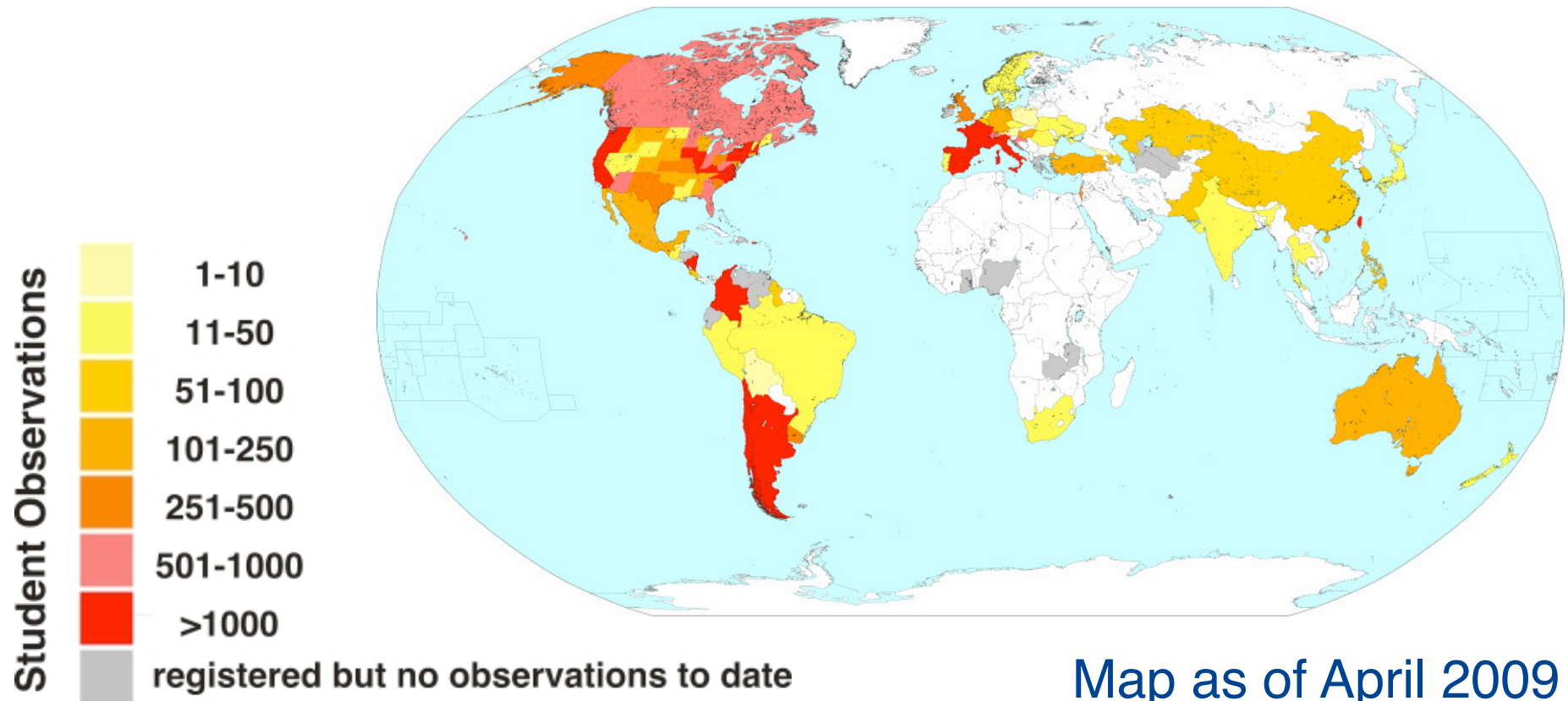
- Education and Public Outreach arm of CERES
- Backbone of Terra/Aqua formal education effort
- A simple way to involve K-12 students in authentic science
- A source of validation data for the CERES cloud retrievals

<http://scool.larc.nasa.gov>



S'COOL Project

- > 76,000 observations from 54 countries and all 50 states
- 45 % from outside the US (77% US participants)
- > 2,800 registered participants from 78 countries



Map as of April 2009

Impact Measures

- ~300 requests for S'COOL materials since Oct. 2008 (**3-fold increase!**)

States “Top Five”

▪PA	22%	↑
▪VA	9%	↓
▪PR	6%	
▪CA	5%	
▪NH	5%	

Countries “Top Five”

▪US	55%	
▪Colombia	13%	↑
▪Argentina	6%	
▪France	6%	
▪Taiwan	4%	

States “Bottom Five”

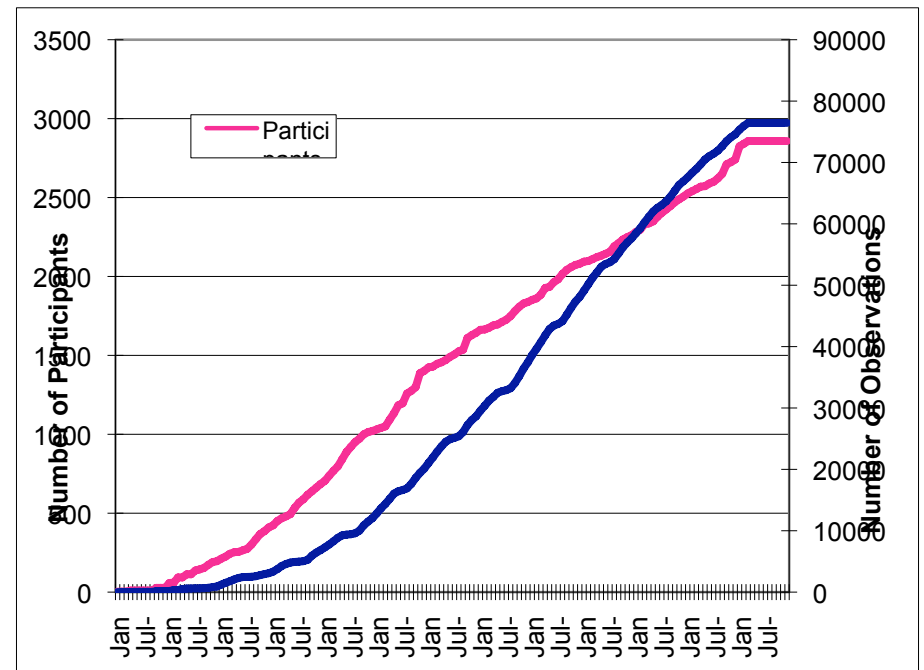
▪DC	12
▪Virgin Islands	9
▪Guam	6
▪Delaware	4
▪Northern Marianas	0

Impact Measures (cont'd)

Database of observations - as of April 15, 2009

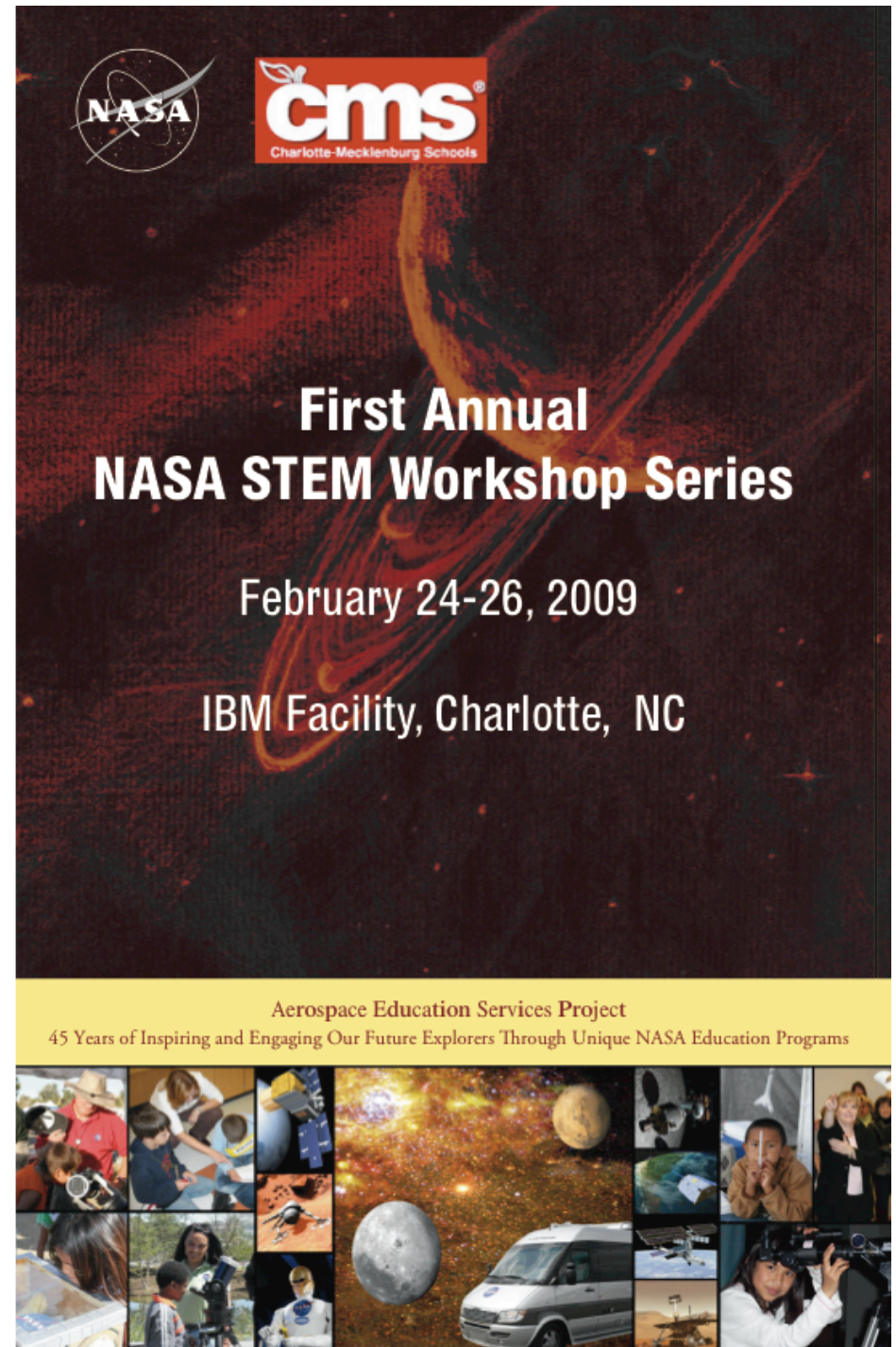
- > 44,500 satellite correspondences (716 match both)
 - For 58% of ground observations ↑
- >2,800 registered participants
 - 38% submitted data
- 78 countries
 - data from 55 countries (70%)
- 84 registrations in January

New record!



S'COOL Presentations Since Oct. 2008

- NSTA Regional, Cincinnati, OH
- NSTA Regional, Portland, OR (Ambassador: Denise Thompson)
- NOAA, Silver Springs, MD
- CIAA via DLN, Charlotte, NC
- CHROME Club at Bruton HS, York County, VA



S'COOL Presentations

Since Oct. 2008 (Cont'd)

- Future CERES instruments on NOAA spacecraft
- Seminar at NOAA lead to ideas for synergy
 - NWS awareness weeks
 - remote reporting at different sites
 - Teacher at Sea program
 - Possible connection with the Girl/Boy scouts,



New Experiences

Skype-based video-conference with a school in Colombia



POR UN COLEGIO SAN JOSÉ MÁS ECOLÓGICO.

El club de astronomía **ANDRÓMEDA**, tiene el gusto de invitarlo (a) a una video conferencia con la NASA.
"EL CALENTAMIENTO GLOBAL"

Lugar: Sala de Conferencia
Fecha: 3 de abril 2009
Hora: 10:00 AM.

Videoconferencistas:

LIN CHAMBERS

Directora del Proyecto S'COOL de la NASA.

CAMELIA DELLER

Traductora de español del Proyecto S'COOL.



New to S'COOL: Roving Observations



289 reports to date

Satellite Overpass Schedule

Latitude: 37.0872
Longitude: -76.4722
Time Zone: -5
Daylight Saving Time: Observed
CERES Spacecraft: AQUA
Start Date (month-day-year): 04-27-2009
End Date (month-day-year): 04-30-2009
E-mail Address: lin.h.chambers@nasa.gov

NOTE: An Overpass Schedule is being sent to you via e-mail. The Satellite Position Information will also appear in this e-mail. Review the e-mail address identified above. If the address is not correct, you will need to request a new [satellite overpass schedule](#).

Daytime Passes:

Month	Day	Year	Local Time	UT
4	27	2009	13:41	17:41
4	28	2009	14:24	18:24
4	29	2009	13:29	17:29
4	29	2009	15:07	19:07
4	30	2009	14:12	18:12

(UT = Universal Time)
Local Time = UT + (-4)

Tuesday

12:41 am Terra overpass

2:24 pm Aqua overpass

Wednesday

11:47 am Terra Overpass

1:29 pm Aqua Overpass

Thursday


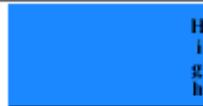
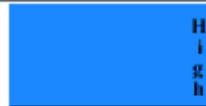
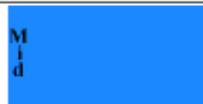





12:29 pm Terra Overpass

2:12 pm Aqua overpass

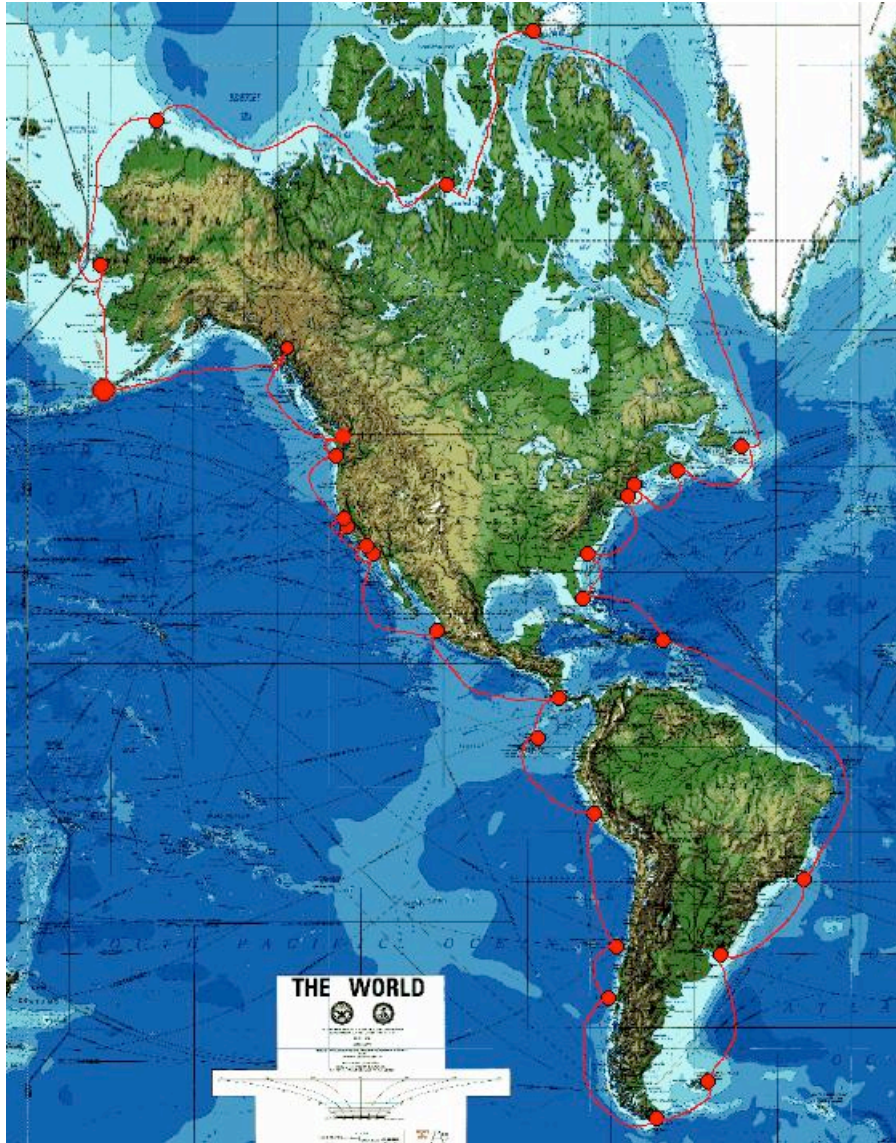
<http://asd-www.larc.nasa.gov/Rover>

New to S'COOL: Roving Observations

User Nickname	Latitude	Longitude	City	State	Country
CERES_Meeting	40.81	-73.97	New York	NY	USA

Ground Observation: 36				Aqua Satellite				
Date: 2008-10-28		Local Time: 13:10:00	Universal Time: 17:10:00	Date: 2008-10-28		Universal Time: 17:21:00		
Opacity	Cloud Cover	Type	Visualization		Altitude (km)	Opacity	Cloud Cover	Phase Temp(K)
								
					3.25	Opaque 47.81	Overcast (95% to 100%) 100	mixed 259.85
Opaque	Overcast (95% to 100%)	Nimbostratus						
Contrails:	Persistent - 00 Short-Lived - 00			<div>View Corresponding MODIS Aqua Satellite Image</div> 				
Surface Observations:	Snow/Ice: No Standing Water: No Muddy: Yes Dry Ground: No Leaves on Trees: Yes							
Temperature: C Barometric Pressure: hPa Relative Humidity:								
Comments: Light rain now falling.								

A True S'COOL Rover



**The Around the Americas
Project:**
An Educational Adventure to
Protect Our Ocean Home

June 2009
To
June 2010

<http://www.aroundtheamericas.com>

A True S'COOL Rover

- Steel-hulled, 64-foot sailing vessel
Ocean Watch
- Full time crew of four including:
 - Journalist
 - Documentary filmmaker
- Also
 - Pacific Science Center educator
 - Ocean and Atmospheric scientists
- Instruments from:
 - UW Applied Physics Laboratory (APL)
 - Joint Institute for the Study of the Atmosphere and Ocean (JISAO)
 - MIT SeaGrant
- S'COOL Observations!

Ports of Call

Port of Call	Country	Distance (nm)
Seattle, Washington	USA	
Victoria, British Columbia	Canada	85
Juneau, Alaska	USA	820
Unalaska/Dutch Harbor, Alaska	USA	1,070
Nome, Alaska	USA	683
Barrow, Alaska	USA	634
Cambridge Bay, Nunavut	Canada	1,083
Resolute, Nunavut	Canada	547
St. John's, Newfoundland	Canada	2,100
Halifax, Nova Scotia	Canada	503
Boston, Massachusetts	USA	362
New York, New York	USA	109
Charleston, South Carolina	USA	705
Miami, Florida	USA	423
San Juan	Puerto Rico	898
Rio de Janeiro	Brazil	3,519
Punta del Este	Uruguay	1,050
Buenos Aires	Argentina	170
Port Stanley, Falkland Islands	United Kingdom	1,120
Puerto Williams	Chile	361
Puerto Montt	Chile	1,171
Valparaiso	Chile	444
Lima/Callao	Peru	1,343
Galapagos Islands	Ecuador	991
Puntarenas	Costa Rica	487
Puerto Vallarta	Mexico	1,448
San Diego, California	USA	1,049
Los Angeles, California	USA	86
Monterey Bay, California	USA	245
San Francisco, California	USA	68
Portland, Oregon	USA	509
Seattle, Washington	USA	134

31 Scheduled Port Stops 11 Countries 24,217 nm

S'COOL in the Field

- FIRST team to do S'COOL observations during field campaign in Atacama Desert, Chile



Your photo here!



S'COOL Needs YOU!

- **Make S'COOL Rover observations!**
- **Participants in every state and >75 countries**
 - Offer to serve as a **resource to a local teacher**
 - Arrange a **S'COOL visit when traveling**
 - Provide **S'COOL info to teachers you know**
- **Presentation materials available**, with script suggestions
- **Help with translation of materials**
- **Serve as resource for scientific content questions sent in by participants**
- **Analyze some data!**

Future of S'COOL

- New Senior Review Process for EPO
- Workshop June 8-10 will ALL missions
- Goal is an integrated EPO plan across missions
- ? Future of S'COOL uncertain ?